Infrastructure as a driver for economic growth and integration in African: what is the way forward?
Edited by the International Conference on Infrastructure Development in Africa

South Africa

PUBLIC-PRIVATE PARTNERSHIP INFRASTRUCTURE PROJECTS IN DEVELOPING NATIONS: LESSONS FOR THE NIGERIAN CONSTRUCTION INDUSTRY.

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That the need for Infrastructure in developing nations and particularly Africa has reached a critical point cannot be over-emphasized if the social and economic development needed by the teaming population must be met. Research has suggested some project delivery schemes/ procurement systems for achieving the task. Fall in global oil prices, fluctuating interest and inflations rates, with depletion in government revenues amongst others have made the traditional procurement systems unsustainable for most governments. Hence, the need for alternative sources to be sought. In the past three decades, Public Private Partnership and its variants have been adopted by governments both in the developed and developing nations as means for infrastructure delivery. The experience in some countries is rather nascent when compared to the years of engagement and extent of use of this model. The study uses an exploratory literature review methodology to evaluate the experience of the Nigerian Construction Industry and compare with the experience of some developing nations. This is with the aim of unpacking lessons from the failures or successes of these nations that can strength the current position of the country in its preparedness in using the model or otherwise. The study concludes by outlining some key lessons from other nations either directly or through World Bank Reports. This study provides industry practitioners and policy makers in the country an assessment guide to evaluating its position and working practices in the light of other developing nations.

Key Words: Cooperation, Governments, People, Private Sector, Procurements, Stakeholders.

1. INTRODUCTION

The Sustainable Development Goals have identified 17 areas of focus if the objectives of improving the quality of life regarding ending poverty, ending hunger, access to quality education, clean water and sanitation, access to good health facilities, gender equality, ensuring sustainable consumption and production pattern, etc. would be achieved. 12 of the 17 goals is directly related to or enhanced by infrastructure delivery (United Nations, 2016). The Construction Industry is viewed as a major provider regarding infrastructure and creation of human settlements. In most of the developing nations infrastructure provision at national and municipal level have been largely in the purview of the central governments (Inderst, and Stewart, 2014). However, the argument in the past three decades is that these tiers of governments lack the necessary capability regarding financial resources and management competencies. To enable them to efficiently deliver capital-intensive infrastructure projects such as bridges, stadia, roads, rail lines, prisons, hospitals, water projects, dams etc. (Frances and Weitz,2003; Parker and Figueria, 2010; Dada et al, 2015). South Africa being the most developed economy in Africa regarding infrastructure count has sufficient experience in the delivery of infrastructure projects through the Public Private Partnership (PPP) arrangements and thus, provides a good benchmark and source of good learning for other African nations, being a developing nation herself and sharing the Ubuntu essence. Contrary to this position, existing data shows there is a lesser count of PPP projects in South Africa when compared to Nigeria (National Planning Commission, 2015). The argument by Du Pleissis (2007) is that for sustainable construction to become a reality in developing nations, research and development must focus on: developing a global database of relevant developing country case studies, collection and publication of best practices from developing countries, promote technology transfer between developing nations and creation of inventory of designs and assessment tools that are appropriate to developing countries. He argued further that the prevailing circumstances in some of the developing countries are different. Namely; Mode of Central government, Major sources of National Revenue, Climatic patterns, Level of industrialization, Infrastructure provision, Economic environment, etc. (Du Pleissis, 2007). It will be more appropriate to compare the experience of a developing nation in Africa with another rather than with a developed western country because the basis of comparison both in context, concept, culture, history, level of industrialization are usually farfetched (Ofori, 2000). Thus, the researcher refuses to join the band wagon of certain African Intelligential that directly interpolate the realities of the developed western economies to mostly agrarian developing economies. In this discuss, it safe to say that some "developing economies" are more in the developing phase than others. Such is the case of the BRICS countries (Brasil, India, China, and South Africa) whose rate of development are faster than the other developing nations. This paper builds on the works of Du Pleissis (2007), Rwelamila (2010), Thwala and Mathonsi (2012), Dada (2015), Ogunsanya, Aigbavboa and Thwala (2016) on the role of procurement in sustainable delivery of infrastructure in developing nations.

2. OBJECTIVE

The objective of the paper is to identify areas of focus for Nigeria in other to have successful if not more successful experiences in the provision of social infrastructure through the Public Private Partnership procurement option.

3. 1 INFRASTRUCTURE DELIVERY

That there is a vast deficit in the provision of infrastructure for sustainable development in most developing nations and particularly across Africa is a fact that cannot be over-emphasized. This position is well established in the literature (Inderst, and Stewart, 2014). The impact of Infrastructure development on economic growth is significant. The World Economic Forum estimated that for every 1 dollar spent on capital projects (utilities, energy, transport, waste management etc.) there is a corresponding 5% -25% economic return per annum. Infrastructure spend for Africa is expected to reach US $180Billion per annum by 2025. The largest investment is expected to be in electricity production and distribution considering investments plans in Ethiopia, Ghana, Kenya, Mozambique, Nigeria, South Africa and Tanzania (Construction Industry Development Board (2011).

The National Integrated Infrastructure Master Plan (NIMP) provides capital allocation framework for infrastructure development in Nigeria over the next 30years drawn in line with the country’s growth aspiration. According to National Planning Commission

(2015), Nigeria needs an estimate of USD 3.0Trillions investment in infrastructure over this period if its goal of sustainable development will be achieved. The highlighted sectors of the economy where deliberate investment is required over this time are: Energy - $ 1Trillion; Transport - $775Billion; Agriculture, Water and Mining- $400Billion; Housing and Regional Development- $350Billion, Information and Communication Technology - $325Billion; Social Infrastructure (Education and Health Facilities) - $150Billion; Vital Registration and Security - $50Billion.

NIMP identified four sources of funding the above infrastructure capital outlay as Government Budgets (Federal and States level), Public Debts, Other Publics sources (Pension Funds and Sovereign wealth funds) and increasing the share of Public Private Partnerships. It proposes a funding ratio of public/private of 52% to 48% respectively.

3.2 PROCUREMENT DELIVERY OPTIONS

Historically, the public sector has been central to the ownership, financing and delivery of infrastructure projects. Public funding of infrastructure in developing economies like Nigeria accounts for about 70% of total project expenditure. About 20% is financed by Private sources while the remaining 10% is backed by multilateral and bilateral development agencies (Bhattacharya, Romania, and Stern, 2012; Delmon, and Delmon, 2011).

However, traditional sources of financing have been stretched to limits. Most Governments are hardly able to finance their capital projects due to the impact of the global financial crisis of the recent past. Likewise, the resources available to the donor agencies and multilateral funds are unlikely to increase (Inderst, and Stewart, 2014). This scenario makes sourcing funds from alternative sources within the private sector needful. Alternative sources of the fund from sovereign funds and pension funds have become more needed now than before. Thus, the delivery of infrastructure projects through Public Private Partnerships has become very popular and gaining prominence in developed and developing countries alike.

Literature has identified more than 12 procurement routes through which construction projects can be delivered. These are; Traditional, Design-Build, Construction Management, Management Contracting, Labour Only, Direct Labour, Public Private Partnerships, Partnering, and Strategic Alliance, etc. (Masterman, 2002; Odusami and Bamisile, 1997; Mathonsi and Thwala 2012; Latham, 1994; Rwelamila, 2010).
The characteristics that distinguish the options above are based on the following;

1. organisation of inputs for the project (how the project will be executed),
2. relationships of the participants,
3. reimbursement regimes for participants, and
4. Contractual arrangements. (Greenwood and Walker, 2002)

Thus, Governments are increasingly adopting PPP as the preferred option in the light of the financial model and risk strategy which it adopts as opposed to the traditional funding pattern.

3.3 EXPLAINING PPP AND ITS CRITIQUE

PPP has been defined as a cooperative relationship between the government and private sector in the delivery of some services in a general sense. This definition has been faulted. Some researchers claim the history of cooperation in one form or another between the governments and the private sectors dates back to several centuries (Wettenhall 2003, and Wetenhall 2005).

Campbell (2001) defines a PPP project as the design, construction, financing, and maintenance/ operation of public infrastructure or public facility by the private sector under a long-term contract. Also, National Treasury (2016) defines PPP as a contract between a public sector institution/ municipality and a private party in which the latter assumes substantial financial, operational and technical risks in the designing, financing, building and operation of a project.

Also, Hodge and Greve (2007) identify five different form in which PPP exist as; Institutional cooperation for joint production and risk sharing, Public policy networks, Long-term infrastructure contracts, Civil society and community development, and Urban renewal and downtown economic development. However its types are Design – Build- Operate- Transfer (DBOT), Design-Build-Finance and Operate (DBFO), (Build-Own- Operate and Transfer), Leases, Concessions etc,.

Ministry of Foreign Affairs of the Netherlands (2013) suggest through their study that the empirical evidence on the efficiency and effectiveness of PPP are limited. It emphasizes that most PPP studies focus on the resource sharing aspects of the transactions rather than on the risk and revenue sharing aspects. They found that motivation for partnerships is usually for resource mobilization instead of effective resource use and that intended benefits are usually vaguely described such that it is difficult to empirically verify or estimate the outcomes.

From the extreme left, Sanger and Crowley (2009) argue that the economic crisis experienced by nations of the world in 2008-2009 which some are yet to recover from is due to the failure of models such as deregulation, privatization, free trade and PPP. The authors further posit that there is a dearth of substantive evidence to support the claims of PPP. The authors conclude that the claims of PPP's are dubious, and it serves as a tool for politicians to hide realities of public spending from government accounts. They claim these arrangements have demonstrated little transparency and entail lots of secretive deals which have led to strings of failures.

The advantage of the PPP has been identified as the government making use of the know-how, and competencies of the private sector which some argue contributes to increased efficiency, project sustainability, and entrance into new markets (Parker and Figueria, 2010). Inforesources (2005) acknowledges that empirical evidence has shown that the PPP can also deliver great value in rural areas where access to infrastructure has been critically lacking. Such gains are welfare benefits, improvement in social indicators, and expansion in public services to the benefit of the poor.

3.4 THE NIGERIAN EXPERIENCE

To claim that Public Private Partnership is a recent phenomenon in the Nigerian experience will connote the lack of adequate knowledge about the workings of the Nigerian state. The use of Public Private Partnership at National and State levels in funding social infrastructure projects dates back to recent decades. However, the actual engaging of the private sector funding and competence in the delivery of economic projects/infrastructure dates back to the 1950s when the Nigerian Oil was discovered. Most of the oil exploration projects/efforts are Joint Venture Projects (A form of Public

Private Partnership) between the Nigerian Oil Company (Nigeria National Petroleum Cooperation) and the multinational oil companies: Shell, Chevron, Agip, Total, Mobil to mention a few (NNPC Official website, 2016). However, due to the nature of secrecy in which the Nation's Oil business is conducted, and these are rarely brought to the fore in the discussion of Public Private Partnerships in Nigeria. Likewise, PPP has largely improved services in the telecommunication industry in Nigeria. Since the deregulation of the industry, the user base has grown from less than 700,000lines in 1999 to more than 148,000,000 active mobile lines by March 2016. Due to private sector investments in the industry (Dada, 2015).

Infrastructure Concession and Regulatory Commission (ICRC) Act, was passed into law in Nigeria in 2005. However, there has been attempts to use the PPP procurement option to deliver social infrastructure projects such as roads, rail lines, airports, hospitals, etc. in the past. Some of these projects were successful however many suffered significant setbacks because the management of the projects lacks proper regulatory frameworks amongst other factors (ICRC Official website, 2016). Figure 1 present status of projects initiated prior to the time the commission came into operation and the status of the projects. A total of 40 projects were inherited by the Infrastructure Concession Regulatory Commission when it was established in 2008. The figure shows that over 37% of the projects are stalled due to improper documentation, litigation or outright cancellation. This further shows the need to improve on the current PPP support structure in the country for greater success.

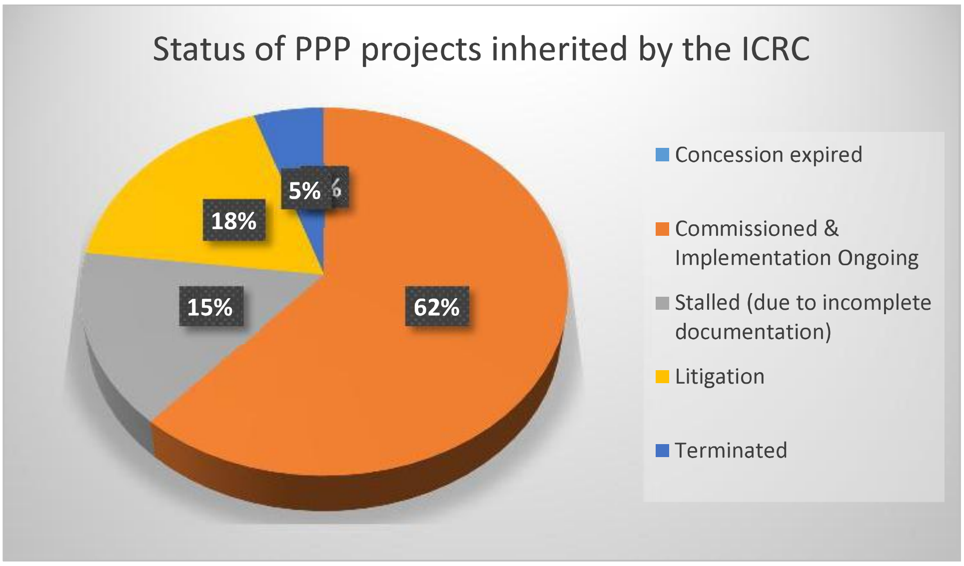

Figure 1. Status of PPP projects inherited by the ICRC (Ogunsanya et al. 2016)

In the past 8years, the Commission has concession seven projects that are currently being implemented. The Commission under its purview has 18 projects in the pipeline in 2013 which comprise of bridge constructions, road dualization projects, prison rehabilitation, rail lines construction, silos construction, and hydro - power projects. The list of projects at the planning stages grew to 48 by 2014. The projects in the new list consist of High Transmission Power Projects, Dams, Port Construction, Railway Lines, Industrial Estate Development, Stadia rehabilitation, Gas pipeline construction, etc. The above details show that the Government of Nigeria has chosen to adopt a wholesale delivery of Infrastructure projects (Economic and Social) through the PPP model. Nigeria being a federating state has 36 states that have equal powers to enact their PPP laws and enter into PPP agreements with potential investors for the delivery of infrastructure projects.

Lagos State, being the main economic hub of the nation, has undertaken flagship of the PPP projects which include Lagos Metro Rail Project, Development of Lekki Free Trade Zone, Independent Power Projects, Lekki Epe toll road project, etc. These projects have helped in solving challenges of the growing needs of the megacity. These projects have their challenges which has cause delays in delivery time on Lagos Metro Rail project, public outcry on the Lekki-Epe toll road. Same is true for other states in the country.

4. RESEARCH METHODOLOGY

This paper employs an exploratory review of literature through the desktop study of leading journals and academic repositories on the subject of PPPs in developing nations context. The paper examined literature from peer reviewed articles, journals such as IEEExplore, Emerald, ScienceDirect, textbooks, government websites and online resources. The research adopts an exploratory qualitative approach. The research undertakes a critical look at PPP projects both in some developing nations and Nigeria with the aim of highlighting useful insights that will enhance future delivery of PPP projects.

5. LESSONS LEARNT

The following are critical to the success of PPP in developing nations from the experiences of the past:

a) Planning: This is important to achieve success in all projects but of particular importance for the PPP projects. Adequate feasibility studies should be done. This is akin to ability of public authorities to improve on their weak capacities and capabilities in fulfilling their commitment by contributing funds and maintain risk sharing agreements (Parker and Figueria, 2010).

b) Guaranteed revenue and cost estimation: As a support to proper planning is detailed financial and economic analysis of the proposed project aided by reliable forecasting projections. The usual models of forecasting must be made adaptable with relevant constants to cater for unstable exchange and interest rates in most developing nations.

c) Availability of Pipeline of viable bankable projects: It is encouraged that the government should commit resources to developing a compendium of viable projects that the Private sector can invest in so that the time lost during planning stage can reduce ((Noumba-Um, 2010).

d) Compliance with Contractual Agreements: Profitability and success of PPP's on the long run is the function of government's commitment to contractual agreements argues Frances and Weitz (2003). A case of Ogun State Government in Nigeria is a succinct example of this case. The former Government signed PPP's contract with several investors ranging from Property Development to Afforestation, Hotel Concessions. With a change in the democratic dispensation, nearly all the contracts were revoked. The concessions that remained were not made until prolonged battles in court and renegotiations.

e) Strong Institutional Arrangements: This implies the extent and impact of control that Central Government has on the projects. There should be sufficient mechanism in place to support the projects which also includes effective monitoring to ensure that essential project parameters are met and delivery timelines are adhered to. In most cases, the delivery of PPP involves multi-government agencies e.g. Department of Finance, Transport, Justice Ministry, Lands Bureau and Town Planning Units. Individual projects have been stalled or delayed because of lack of cooperation or sufficient buy-in by government agencies required to facilitate the project ((Ministry of Foreign Affairs of the Netherlands, 2013)

f) The value of Competitive Procurement: Literature has sufficiently established that one sure way to ensure value for money is through competition. Competition should be fostered based on a broad array of parameters for choosing the preferred bidder for the PPP project. Using the lowest bidder regarding price has sufficiently been proved not to produce the best, such parameters like social inclusion, sustainability, employment for the local community. Information exists concerning certain companies that have won PPP bids that have developed cold feet in delivering the projects due to lack of capacity. Where there are uncompetitive bids, the private sector tends to take advantage by escalating the cost or delaying the delivery timelines.

g) Stakeholder Engagement: Most PPP's for infrastructure projects in developing nations would have attained an advanced level in the planning and implementation before a very critical component is engaged. The agents of the government, elected politicians, and public officers in government seldom forget that because they represent the people does not mean they can replace "the people". The actual “public” in PPP has been misconstrued as "government". Whereas in most cases, the government is just a little percentage of the people in society. Proper and early stakeholder engagement which must include of local communities, labor organizations and civil societies are essential. This has been the primary reason why some PPP's were stalled or failed (Ministry of Foreign Affairs of the Netherlands, 2013).

h) Strategic Enlightenment Programs: Some opined that the PPP is a scheme to "privatize" national assets, or another means of Western re-colonization of developing economies. Most PPP's have had funds coming into the nation through Foreign Direct Investments because location investors usually lack the financial capability to execute large infrastructure projects that are very capital intensive. The Governments, investors and civil society will need to do better regarding advocacy in support of Central and Local Governments using the PPP' model to deliver needed infrastructure.

i) High Transparency: PPP’s contracts in the past have been shrouded in secrecy and non-disclosure of project details to the public. The cost elements of certain PPP’s in some developing nations have been queried by experts. How did the private sector arrive at the cost components in the agreement?

j) Government Fiscal Support: In India, PPP projects enjoy support from the government regarding benefiting from a viability gap fund which after approval can be sourced for up to 20% of the project cost. The Infrastructure Fund also provide a pool for additional funding for private sector engaging in investments roads, ports, energy and telecommunication (Ramchand, 2008; Sarangi, 2002).

k) Deliberate development of domestic financial and capital markets: In many countries in the developing nations, there is small capitalization of the local banks, and many cannot provide funding for the infrastructure needed for the capital projects such as a cross-national high-speed passenger rail (Noumba-Um, 2010).

l) Provision of subsidies by the government: PPP's have supported the delivery of infrastructure in many metropolitan cities where the people can pay the toll fees and other charges. However less PPP projects are in the rural areas where the people have limited means to pay, and most infrastructure needs are in the countryside though probably not at the scale in the metropolitan cities. Hence, governments have to provide subsidies to make the rural areas attractive to the private sector.

6. IMPLICATIONS FOR NIGERIAN CONSTRUCTION INDUSTRY

Success in the delivery of PPP projects in Nigeria has been defined as the existence or availability of facility which was hitherto lacking by some. This paradigm is the lowest form of evaluation in the delivery of infrastructure assets. Just like in the telecommunication industry, provision of mobile or fixed wireless lines that were not there before cannot not be the means of evaluation but critical issues of call rates, the number of drop calls, network interconnectivity, quality of voice calls, internet speed etc. In the same vein, evaluation of PPP projects in Nigeria should be on the basis of value for money, quality of service, efficiency, risk sharing, responsibilities allocation, whole life cost of the infrastructure, future implications of the cost of infrastructure etc. Literature has identified that effective planning, guaranteed revenue and accurate cost estimation, adequate stakeholder engagement, developing a pipeline of projects, developing strong financial and capital markets, government fiscal support, strategic enlightenment programs, and competitive procurement are required for successful implementation of PPP projects within the developing nation’s context. There is need for the Nigerian Construction Industry to develop competency in terms of training, capacity, equipment, funding to meet the current challenge.

7. CONCLUSION

The study aims at evaluating conditions for successful implementation of public-private partnership projects within the developing nations' context. The study uses an exploratory literature review approach in the research. The study observed that studies into the performance of PPP lack significant empirical backings. Some claims emphasize the initial gains of the model while others take a cautious stand on its cost implications over the long run and the current failings in some PPP projects in other economies. One major question that stand out is whether the public is not being made to pay more for infrastructure that would cost less under the traditional procurement model. It also goes without saying that, the private sector coming on board is for some identified benefits. There is an equilibrium to be maintained between public good and quest for profit. The study concludes that delivering better PPP's entails a broad spectrum of criteria which ranges from effective planning to adequate stakeholder engagement and strong institutional support.

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